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Electricity Pricing: Choices For The 80's

American Attitudes on Electricity Pricing and Economic Growth

Survey Conducted by
Cambridge Reports, Inc.
For Union Carbide Corporation

WEST VIRGINIA

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Preface

Electricity has become an issue of increasing public concern. After decades of *declining* prices, rapid increases in charges to all electricity consumers occurred during the 1970s. Higher costs incurred by the utilities—especially the rapid escalation of the cost of fuel needed to generate electricity—have made it necessary for utilities to increase the rates they charge for electricity sold to factories, stores, and homes.

Since 1972, the price charged for each unit of electricity used by industry has increased almost *twice* as much as the price charged for each unit used by residential consumers. Electricity rates to industry rose nearly 20% in 1980, putting an onerous burden on those industries that are electricity-intensive in their operations. But while these higher electricity charges to industry are almost inevitably passed along in the total price consumers pay for goods and services, Americans are more immediately concerned about the increases in the electricity bills they pay at home. So not surprisingly, the price of residential electricity has been the main factor in the public debate about electricity price structures.

What is not generally appreciated by the public is that the sharp increases in industry's electric rates are partly the result of rate-making policies that force industry to subsidize other types of users.

Inescapable increases in utility generating costs and higher rates for electricity users have led some federal and state policymakers to try to hold down rises in residential rates by moving away from the historical formula used to set electricity rates, a formula called "cost of service." The "cost of service" principle means that utilities charge each different class of customer what it actually costs to supply that class with the electricity it uses. Since it costs a utility more to bring one kilowatt hour of electricity to a single family home than to a large manufacturing facility because of economies of scale, home owners pay more under cost of service for that one kilowatt than do industrial customers.

Many different rate-making approaches have been proposed that would circumvent the cost-of-service principle. Almost all of these approaches require industry and commerce to subsidize other electricity users by having industry's rates raised disproportionately when compared to the rates of other classes of users. In West Virginia, for example, residential rates rose 78% from 1972 to 1980. Commercial rates increased 89% and industrial rates escalated 161% in the same period.

Union Carbide and its employees, customers, shareholders and the communities in which we operate have a vital stake in seeing America develop sound electricity pricing policies. In 1980, Union Carbide purchased 10.4 billion kilowatt hours of electricity, enough to supply the entire State of California for one month. Over the

past 8 years, Union Carbide's sales increased about 200% while consumption of electricity increased only 20%, largely because of strenuous conservation efforts. In this same period, Union Carbide's electricity costs rose almost 400%, and we expect them to increase more than 1200% over the next 20 years. By the year 2000, we expect that we will be using more than twice as much electricity as we did in 1980 to keep pace with expansions of our businesses.

Because Union Carbide believes that public opinion is a key factor in determining both the direction and the success of public policies, we commissioned a public opinion survey in the Summer of 1981 to gauge the public mood about electricity pricing, electricity supplies, and the public's sentiment on electricity pricing policy choices. Since electricity policies are decided at the state as well as at the national level, we also commissioned in-depth surveys in six states where Union Carbide has major operations—Connecticut, West Virginia, Alabama, Louisiana, Ohio, and California.

To test the implications of various electricity pricing approaches on industry, a battery of questions were asked relating pricing policies to economic growth, jobs, and the prices people pay for what industry produces. Most Americans say they do not want electricity pricing practices to stand in the way of economic growth in the areas in which they live.

- About 7 out of 10 West Virginians recognize that industry pays attention—3 in 10 saying "a lot of attention"—to what the electric rates are when making a plant location decision.

- Approximately 6 out of 10 oppose charging industry more than it costs to supply them with electricity if it means that some companies might not expand their operations, move operations elsewhere, or that the number of new plants and jobs in their area would be reduced.

- About 8 out of 10 West Virginians recognize that the prices charged by industry are affected by what industry pays for electricity—one in four saying "a large effect." And nearly 6 out of 10 would oppose raising industrial electrical rates, if, in fact, this did lead to increased prices for the goods and services industry produces.

The public's concern about the health of the American economy, reflected in this survey by their choice of policy alternatives that support economic growth, is consistent with the findings of three earlier surveys of public attitudes on economic issues sponsored by Union Carbide. We found in these surveys, conducted from late 1979 through early 1981, that Americans expressed strong and consistent concerns about our economy; had an awareness that America has to do a better job of competing in the world; and believed that government is the main institutional cause for the

decline in the growth and competitiveness of our economy. The results of these surveys reinforced findings of public opinion polls commissioned by others that showed that economic issues were the subjects most troubling to the public as the nation entered the new decade.

As the *Vital Consensus* (published in April, 1980) found, most Americans believed economic growth helped them personally and benefited the entire nation as well; they found growth highly desirable, but they were pessimistic about the likelihood of economic growth in the coming years. *Adversaries or Allies* (published in November, 1980) found almost universal agreement that our difficult economic problems—such as the high rate of inflation, rising energy costs, and inefficient governmental regulations—are exacerbated by needless conflicts among the various sectors of our society. And the public said they wanted all of our institutions—including government and business—to work together more closely to solve these problems. *The Emerging Consensus* (published in April, 1981) found continuing concern over the present state of the economy, general agreement that our economic problems were both a cause and a consequence of our present international trade difficulties, and a growing consensus that government and business must work together more closely if American industry is to become more competitive within a structure of international trade that is fair to all nations.

This fourth survey found most Americans continuing to select policy alternatives that would encourage industrial expansion, jobs, and sound economic growth. On the specific issue of electricity pricing, significant majorities concluded that their personal interests will be served best by the cost of service pricing approach.

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MONITION

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Introduction

This is an analysis of a survey of public attitudes toward the problem of electricity supply and cost in West Virginia and toward a number of possible electricity pricing policy options. The survey was conducted using a sample of 359 adults scientifically selected to reflect the attitudes of the entire over-18, non-institutionalized population of West Virginia. All interviews were conducted by telephone on a confidential basis by trained, professional interviewers under the supervision of Cambridge Reports, Inc. field staff, between July 17 and July 29, 1981.

Objectives

This survey has the following objectives:

* To assess overall public awareness of and concern about the supply of electricity in West Virginia;
* To measure current attitudes toward electric utilities and the rates they charge; and
* To determine attitudes toward various electric utility rate issues.

Methodology

The methods used in this survey were the same professional ones used in all Cambridge Reports, Inc. surveys. All interviews were conducted by trained, professional interviewers under the supervision of the Cambridge Reports, Inc. field staff and were returned to Cambridge for coding and data processing using modern computer methods.

Notes on analysis

In reading through the report, please keep in mind the following points:

* The marginals on demographic charts (the number to the left of each demographic designation) show the percentage that the group represents of the overall base population; when the marginal is 15% or less on charts where the base population is approximately 359, conclusions based on these responses should be made with caution, as the numbers are based on a sample size too small to be entirely reliable;

* A copy of the questionnaire appears in Appendix A, for quick referral;

* Demographic charts discussed, but not included, in the text are available upon request from the Union Carbide Corporate Communications Department;

* In some cases, tables and charts may not add to exactly 100% due to rounding.

Summary

This survey of the attitudes of West Virginia residents toward electric utility issues was conducted simultaneously with a national survey using the same questionnaire. The full analysis of the national survey results can be found in the report "Public Attitudes about Electric Utility Issues." The present report highlights how the attitudes of West Virginia residents revealed in the survey compare to the attitudes of the American public as a whole.

On the major points of the survey, we find that the views of the citizens of West Virginia closely resemble those of all Americans. West Virginians differ from the national norms on two major issues, however.

First of all, residents of this state, not surprisingly, are much more favorable to coal conversion than the rest of the nation. West Virginia residents are also more inclined than other people to attribute electric rate increases in other areas to a failure to convert to coal.

At the same time, West Virginians are very happy about their own electric rates and more inclined than the nation as a whole to see the price of electricity lagging behind the price of other goods.

In terms of attitudes toward cost-of-service pricing, the pattern in West Virginia is similar to the national pattern. That is, West Virginia residents support the overall concept of cost-of-service pricing, but are skeptical when they learn that industry might, as a result, pay a lower per unit price for electricity than residential customers. Only when they see benefits for themselves--in terms of lower prices for consumer goods or greater economic development--do they truly favor cost-of-service pricing as a practical choice.

The Problem of Electricity Supplies

The first part of our survey checked people's expectations about electricity supply problems in their area, both now and over the long term, and we then went on to ask people how they feel about various ways of ensuring adequate supplies of electricity.

The responses to these questions reveal some significant differences between the views of West Virginia residents and the views of the American public as a whole. In the first place, West Virginians are strongly committed to coal. As the next table shows, over nine out of every ten people in West Virginia support the use of coal to generate electricity. Over half the state's population--more than twice the national average--are strong supporters of coal use.

I'm going to read you a proposal for ways of providing an adequate supply of electricity, and I'd like you to tell me whether you strongly favor, favor, oppose, or strongly oppose it: increasing our use of coal to generate electricity.

	Strongly favor	Favor	Oppose	Strongly oppose	(Don't know)
National	23%	57	13	5	2
West Virginia	57%	38	3	2	--

Demographic breakdowns show that, in West Virginia, strong support for coal use is more prevalent among older people than among younger people. West Virginia, however, is so favorable to coal that few real demographic patterns are evident. A complete demographic breakdown follows.

I'm going to read you some proposals for ways of providing an adequate supply of electricity, and I'd like you to tell me whether you strongly favor, favor, oppose or strongly oppose each one: increasing our use of coal to generate electricity.

1. STRONGLY FAVOR
2. FAVOR
3. OPPOSE
4. STRONGLY OPPOSE
5. DK

		Responses = 360	1.	2.	3.	4.	5.
		MARGINALS	57	38	3	2	0
		18. PRICE BASED ON UTILITY'S COSTS					
32		TOTALLY	64	32	2	3	0
24		MOSTLY	48	46	3	1	1
35		SOMEWHAT	58	37	3	2	0
5		NOT AT ALL	44	45	10	0	0
3		DK	45	47	8	0	0
		27. SEX					
50		FEMALE	55	40	3	2	1
50		MALE	58	36	4	2	0
		28. EDUCATION					
23		SOME HIGH	52	35	9	4	0
45		HIGH GRAD	60	38	2	0	0
14		SOME COLLEGE	48	48	0	4	0
18		COLLEGE PLUS	58	37	2	1	1
1		DK	100	0	0	0	0
		29. INCOME					
21		0-9999	51	39	5	4	0
33		10-19999	52	44	2	2	0
39		20K AND OVER	64	33	3	1	0
6		REFUSED	55	35	5	0	4
		30. AGE					
40		18-35	49	44	5	1	1
32		36-55	61	36	3	1	0
27		55 AND OVER	63	32	1	4	0
1		REFUSED	69	31	0	0	0

Given this commitment to coal and the stake their state has in its development, it isn't surprising that West Virginians are less favorable than the nation as a whole toward the idea of nuclear power plant construction. While the nation is nearly divided on the question, West Virginians reject nuclear power by a 16-point margin.

I'm going to read you a proposal for ways of providing an adequate supply of electricity, and I'd like you to tell me whether you strongly favor, favor, oppose, or strongly oppose it: building more nuclear plants to generate electricity.

	Strongly favor	Favor	Oppose	Strongly oppose	(Don't know)
National	15%	32	29	21	2
West Virginia	12%	28	25	31	4

Demographic breakdowns show few clear patterns of support or opposition to nuclear power in West Virginia. A complete demographic analysis follows.

I'm going to read you some proposals for ways of providing an adequate supply of electricity, and I'd like you to tell me whether you strongly favor, favor, oppose, or strongly oppose each one: building more nuclear power plants to generate electricity.

1. STRONGLY FAVOR
2. FAVOR
3. OPPOSE
4. STRONGLY OPPOSE
5. DK

	Responses = 360	1.	2.	3.	4.	5.
	MARGINALS	12	28	25	31	4
	18. PRICE BASED ON UTILITY'S COSTS					
32	TOTALLY	13	24	26	31	5
24	MOSTLY	8	37	27	28	0
35	SOMEWHAT	11	24	24	34	6
5	NOT AT ALL	15	35	20	25	5
3	DK	18	19	18	27	18
	27. SEX					
50	FEMALE	10	27	24	32	7
50	MALE	13	29	26	30	2
	28. EDUCATION					
23	SOME HIGH	22	23	18	30	7
45	HIGH GRAD	9	24	30	35	2
14	SOME COLLEGE	2	30	19	43	6
18	COLLEGE PLUS	11	41	29	14	5
1	DK	0	0	0	54	46
	29. INCOME					
21	0-9999	16	19	18	39	7
33	10-19999	10	33	28	26	3
39	20K AND OVER	12	26	27	30	4
6	REFUSED	0	34	22	39	4
	30. AGE					
40	18-35	11	32	26	28	2
32	36-55	11	24	29	30	5
27	55 AND OVER	13	26	18	36	7
1	REFUSED	0	0	37	31	31

Electric Utilities and Their Rates

The second part of our survey, which tested people's perceptions about electric rates and about the possible causes of rate increases, reveals other notable differences between West Virginia residents and the nation as a whole.

As the next table shows, West Virginians differ from the nation as a whole in that nearly half describe their electric bills as "about right." The number who describe their bills as "very high" is 12 points below the national avearge.

Generally, would you say that the rates your electric company charges are very high, somewhat high, about right, somewhat low, or very low?

	Very high	Somewhat high	About right	Somewhat low	Very low	(Don't know)
National	28%	38	29	3	1	1
West Virginia	16%	36	44	3	1	1

Demographic breakdowns show that women in West Virginia are more inclined than men to feel their bills are high; an actual majority of men say their bills are all right. Poorer people are also somewhat likelier than wealthier people to feel their bills are high. A complete demographic breakdown follows.

Generally, would you say that the rates your electric company charges are very high, somewhat high, about right, somewhat low, or very low?

1. VERY HIGH
2. SOMEWHAT HIGH
3. ABOUT RIGHT
4. SOMEWHAT LOW
5. VERY LOW
6. DK

	Responses = 360	1.	2.	3.	4.	5.	6.
	MARGINALS	16	36	44	3	1	1
	18. PRICE BASED ON UTILITY'S COSTS						
32	TOTALLY	17	33	46	4	0	1
24	MOSTLY	12	32	53	3	0	0
35	SOMEWHAT	12	46	37	3	1	1
5	NOT AT ALL	35	24	36	0	6	0
3	DK	45	18	37	0	0	0
	27. SEX						
50	FEMALE	21	39	37	2	1	1
50	MALE	11	33	50	4	1	1
	28. EDUCATION						
23	SOME HIGH	21	31	42	2	2	1
45	HIGH GRAD	16	39	41	3	0	1
14	SOME COLLEGE	14	44	37	5	0	0
18	COLLEGE PLUS	11	29	57	3	0	0
1	DK	0	46	54	0	0	0
	29. INCOME						
21	0-9999	21	40	33	3	1	3
33	10-19999	16	31	50	2	0	0
39	20K AND OVER	10	41	44	4	1	0
6	REFUSED	35	22	43	0	0	0
	30. AGE						
40	18-35	11	44	39	5	1	0
32	36-55	22	32	45	0	0	1
27	55 AND OVER	17	28	48	4	1	1
1	REFUSED	0	31	69	0	0	0

West Virginia residents are also less inclined than the people of the nation as a whole to think electric bills are going up faster than prices in general. The next table shows that, by a four-to-one margin, West Virginians see the prices of other things increasing faster than the price of electricity.

Which do you think has gone up more since 1967--the cost of electricity or the cost of most other things?

	Cost of electricity	(Don't know)	Cost of most other things
National	29%	6	65
West Virginia	17%	5	78

Demographic breakdowns show that the responses to this question are fairly uniform through the population of West Virginia. A complete demographic analysis follows.

Which do you think has gone up more since 1967--the cost of electricity or the cost of most other things?

1. COST OF ELECTRICITY 2. DK
3. COST OF OTHERS

		1.	2.	3.
Responses = 359				
MARGINALS		17	5	78
	18. PRICE BASED ON UTILITY'S COSTS			
32	TOTALLY	18	7	75
24	MOSTLY	15	5	80
35	SOMEWHAT	13	6	81
5	NOT AT ALL	29	0	71
3	DK	36	0	64
	27. SEX			
50	FEMALE	21	7	73
50	MALE	13	4	83
	28. EDUCATION			
22	SOME HIGH	18	5	77
45	HIGH GRAD	15	5	80
14	SOME COLLEGE	18	4	79
18	COLLEGE PLUS	18	9	73
1	DK	0	0	100
	29. INCOME			
21	0-9999	16	11	73
33	10-19999	17	5	78
39	20K AND OVER	16	2	82
6	REFUSED	21	13	66
	30. AGE			
40	18-35	12	2	86
32	36-55	24	5	71
27	55 AND OVER	15	11	74
1	REFUSED	37	0	63

Furthermore, as might be expected from their strong support for coal, West Virginians are inclined to attribute rising electricity prices to the failure of utilities to convert more quickly to coal. As the table shows, two-thirds of the West Virginia sample consider this a very important factor in rising electricity prices.

Here is a reason some people give for the rise in electricity prices during the last 5 years or so. Please tell me whether you think this is a very important, somewhat important, not very important, or not at all important reason for rising electricity prices: the slow pace of conversion to greater use of coal to generate electricity.

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	46%	35	13	4	3
West Virginia	65%	25	9	2	2

Demographic breakdowns again show fairly uniform pro-coal sentiment in the West Virginia population. A complete demographic breakdown follows.

Here are reasons some people give for the rise in electricity prices during the last 5 years or so. Please tell me if you think each of these is a very important, somewhat important, not very important, or not at all important reason for rising electricity prices: the slow pace of conversion to greater use of coal to generate electricity.

1. VERY IMPT
2. SOMEWHAT IMPT
3. NOT VERY IMPT
4. NOT IMPT AT ALL
5. DK

		1.	2.	3.	4.	5.
Responses = 360						
MARGINALS		62	25	9	2	2
	18. PRICE BASED ON UTILITY'S COSTS					
32	TOTALLY	68	20	9	1	2
24	MOSTLY	56	29	11	2	1
35	SOMEWHAT	61	27	10	1	1
5	NOT AT ALL	66	25	5	5	0
3	DK	55	29	0	0	16
	27. SEX					
50	FEMALE	61	26	7	3	4
50	MALE	63	25	12	1	0
	28. EDUCATION					
23	SOME HIGH	62	23	9	1	5
45	HIGH GRAD	67	25	6	2	1
14	SOME COLLEGE	53	33	12	2	0
18	COLLEGE PLUS	58	25	13	2	3
1	DK	100	0	0	0	0
	29. INCOME					
21	0-9999	63	27	5	2	2
33	10-19999	64	25	8	0	3
39	20K AND OVER	62	23	13	2	0
6	REFUSED	51	31	9	4	4
	30. AGE					
40	18-35	59	28	12	0	2
32	36-55	66	22	8	3	0
27	55 AND OVER	62	26	7	1	4
1	REFUSED	69	0	0	31	0

Finally, when West Virginians are asked to consider the cost of electricity in light of its benefits, a majority say prices are about right. The group who say rates are high is 19 points smaller in West Virginia than in the nation as a whole.

Considering all the different ways you use electricity in your daily life and the benefits you receive for what you pay for electricity, do you feel that the rates your electric company charges are very high, somewhat high, about right, somewhat low, or very low?

	Very high	Somewhat high	About right	Somewhat low	Very low	(Don't know)
National	22%	44	30	3	1	1
West Virginia	13%	34	50	2	1	1

Demographic breakdowns show that lower-income and less-educated people are somewhat more inclined than their counterparts to feel that prices for electricity are high. Women, as always, are more inclined than men to feel prices are high. A complete demographic analysis follows.

Considering all the different ways you use electricity in your daily life and the benefits you receive for what you pay for electricity, do you feel that the rates your electric company charges are very high, somewhat high, about right, somewhat low, or very low?

1. VERY HIGH
2. SOMEWHAT HIGH
3. ABOUT RIGHT
4. SOMEWHAT LOW
5. VERY LOW
6. DK

	Responses = 360	1.	2.	3.	4.	5.	6.
	MARGINALS	13	34	50	2	1	1
	18. PRICE BASED ON UTILITY'S COSTS						
32	TOTALLY	17	30	50	2	1	0
24	MOSTLY	11	29	57	3	0	0
35	SOMEWHAT	9	44	44	2	1	1
5	NOT AT ALL	25	25	45	0	0	5
3	DK	10	26	64	0	0	0
	27. SEX						
50	FEMALE	16	39	43	2	0	1
50	MALE	10	29	56	2	1	1
	28. EDUCATION						
23	SOME HIGH	18	25	57	0	0	0
45	HIGH GRAD	13	37	48	1	1	0
14	SOME COLLEGE	8	43	44	2	0	2
18	COLLEGE PLUS	10	32	51	7	0	1
1	DK	0	100	0	0	0	0
	29. INCOME						
21	0-9999	17	40	41	0	1	0
33	10-19999	10	31	55	3	0	0
39	20K AND OVER	10	35	50	2	1	1
6	REFUSED	27	30	43	0	0	0
	30. AGE						
40	18-35	10	40	47	3	1	0
32	36-55	14	35	49	0	1	1
27	55 AND OVER	16	26	54	3	0	1
1	REFUSED	0	31	69	0	0	0

Utility Rate Issues

As we mentioned earlier, the proportion of people in West Virginia who back cost-of-service pricing--the focus of the third part of our survey--is similar to that in the nation as a whole. Looking at the responses to our most general question on this issue, displayed in the table below, we see that the numbers in West Virginia are fairly close to the national norm.

Just in general, do you feel that the price of electricity to a consumer should be based totally, mostly, somewhat, or not at all on what it actually costs an electric utility to supply electricity to that consumer?

	Totally	Mostly	Somewhat	Not at all	(Don't know)
National	28%	30	35	4	3
West Virginia	32%	24	35	5	3

Demographic breakdowns show that higher-income and better-educated people in West Virginia are somewhat more likely than their counterparts to feel that prices should be based entirely or mostly on the cost of service. Older people are slightly more likely than younger people to take this point of view. A complete demographic breakdown follows.

Just in general, do you feel that the price of electricity to a consumer should be based totally, mostly, somewhat, or not at all on what it actually costs an electric utility to supply electricity to that consumer?

1. TOTALLY
2. MOSTLY
3. SOMEWHAT
4. NOT AT ALL
5. DK

	Responses = 360	1.	2.	3.	4.	5.
	MARGINALS	32	24	35	5	3
	18.PRICE BASED ON UTILITY'S COSTS					
32	TOTALLY	100	0	0	0	0
24	MOSTLY	0	100	0	0	0
35	SOMEWHAT	0	0	100	0	0
5	NOT AT ALL	0	0	0	100	0
3	DK	0	0	0	0	100
	27.SEX					
50	FEMALE	32	23	36	7	2
50	MALE	33	25	35	4	4
	28.EDUCATION					
23	SOME HIGH	31	14	39	11	6
45	HIGH GRAD	34	26	34	5	2
14	SOME COLLEGE	35	27	35	2	2
18	COLLEGE PLUS	31	28	35	3	3
1	DK	0	0	100	0	0
	29.INCOME					
21	0-9999	33	12	43	6	5
33	10-19999	29	29	33	5	4
39	20K AND OVER	37	26	32	4	2
6	REFUSED	17	21	45	13	4
	30.AGE					
40	18-35	27	27	40	4	2
32	36-55	36	20	32	8	4
27	55 AND OVER	36	24	32	5	3
1	REFUSED	0	31	31	0	37

APPENDIX A

The Questionnaire

On a scale from "1" to "7," where "1" means "not difficult at all" and "7" means "very difficult," I would like you to tell me how difficult you feel the problem of providing an adequate and reliable supply of electricity in your area is. The more difficult you feel the problem is, the higher the number you would give.

1. How difficult today is the problem of providing an adequate and reliable supply of electricity in your area?

	Not difficult at all						Very difficult	[DON'T KNOW]
	1	2	3	4	5	6	7	8
National	25%	14	18	14	16	4	6	1
West Virginia	33%	16	13	13	15	4	5	1

2. How difficult 10 years from now do you think the problem of providing an adequate and reliable supply of electricity will be in your area?

	Not difficult at all						Very difficult	[DON'T KNOW]
	1	2	3	4	5	6	7	8
National	11%	7	11	12	17	14	24	5
West Virginia	16%	10	11	11	16	10	19	7

I'm going to read you some proposals for ways of providing an adequate supply of electricity, and I'd like you to tell me whether you strongly favor, favor, oppose, or strongly oppose each one.

3. Increasing our use of coal to generate electricity

	Strongly favor	Favor	Oppose	Strongly oppose	(Don't know)
National	23%	57	13	5	2
West Virginia	57%	38	3	2	--

4. Building more nuclear power plants to generate electricity

	Strongly favor	Favor	Oppose	Strongly oppose	(Don't know)
National	15%	32	29	21	2
West Virginia	12%	28	25	31	4

5. Increased conservation of electricity by individual consumers, business, and industry

	Strongly favor	Favor	Oppose	Strongly oppose	(Don't know)
National	40%	46	8	3	2
West Virginia	39%	47	9	3	2

6. On a scale from "1" to "7," how would you rate your electric company overall if "1" means "very, very bad" and "7" means "very, very good"?

	Very, very bad						Very, very good	[DON'T KNOW]
	1	2	3	4	5	6	7	8
National	5%	3	11	18	27	19	18	--
West Virginia	3%	3	6	12	24	20	32	--

7. Approximately what is your average monthly electric bill?

	$0-25	$26-50	$51-75	$76-100	$101-125	$126-150	$151-175	$176-200	Over $200	(Don't know)
National	19%	37	17	12	4	2	1	1	2	5
West Virginia	22%	45	16	10	2	1	1	--	--	4

8. Generally, would you say that the rates your electric company charges are very high, somewhat high, about right, somewhat low, or very low?

	Very high	Somewhat high	About right	Somewhat low	Very low	(Don't know)
National	28%	38	29	3	1	1
West Virginia	16%	36	44	3	1	1

9. Which do you think has gone up more since 1967--the cost of electricity or the cost of most other things?

	Cost of electricity	(Don't know)	Cost of most other things
National	29%	6	65
West Virginia	17%	5	78

10. Do you think your electric company sets its own rates, or does a state commission set the rates that your electric company charges?

	Electric companies set own rates	(Don't know)	State commission sets rates
National	42%	9	49
West Virginia	31%	15	53

Here are reasons some people give for the rise in electricity prices during the last 5 years or so. Please tell me if you think each of these is a very important, somewhat important, not very important, or not at all important reason for rising electricity prices.

11. Increased costs of fuel used to generate electricity

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	54%	38	5	2	1
West Virginia	51%	38	9	2	1

12. Dependence on imported oil as a fuel for generating electricity

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	46%	31	15	7	1
West Virginia	43%	25	17	11	3

13. The time it takes to meet environmental and health and safety regulations that are required by the government before a new power plant can be built

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	47%	35	12	5	2
West Virginia	49%	32	12	4	4

14. The cost of controlling and decreasing air and water pollution caused by power plants

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	45%	35	15	3	2
West Virginia	50%	31	10	4	4

15. The slow-down in constructing nuclear power plants

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	33%	33	23	7	4
West Virginia	33%	27	21	12	7

16. The slow pace of conversion to greater use of coal to generate electricity

	Very important	Somewhat important	Not very important	Not at all important	(Don't know)
National	46%	35	13	4	3
West Virginia	65%	25	9	2	2

17. Considering all the different ways you use electricity in your daily life and the benefits you receive for what you pay for electricity, do you feel that the rates your electric company charges are very high, somewhat high, about right, somewhat low, or very low?

	Very high	Somewhat high	About right	Somewhat low	Very low	(Don't know)
National	22%	44	30	3	1	1
West Virginia	13%	34	50	2	1	1

18. Just in general, do you feel that the price of electricity to a consumer should be based totally, mostly, somewhat, or not at all on what it actually costs an electric utility to supply electricity to that consumer?

	Totally	Mostly	Somewhat	Not at all	(Don't know)
National	28%	30	35	4	3
West Virginia	32%	24	35	5	3

19. Do you think that poorer people should pay less for the electricity they use or do you think that they should pay the same rates as other users?

	Pay less	(Don't know)	Pay the same
National	33%	2	64
West Virginia	33%	4	63

20. It has been proposed that the government help poorer people pay for a certain basic amount of electricity. Would you strongly favor, somewhat favor, somewhat oppose, or strongly oppose such a program?

	Strongly favor	Somewhat favor	Somewhat oppose	Strongly oppose	(Don't know)
National	26%	34	20	19	1
West Virginia	24%	38	18	18	2

21. In many parts of the United States industries that use a lot of electricity pay less than residential electricity users for each unit of electricity they use. Some say it is fair that industrial users pay less for each unit of electricity because it actually costs less to produce, transmit, and maintain this high volume, high voltage electrical service to industrial users than to provide electricity to residential users. Others say this is not fair. Even if it costs less to provide their service, they say industrial users should still pay the same rates as residential users because they can afford higher electricity rates more than residential users can. Assuming that it actually does cost less to provide electricity to industrial users, would you favor a system of charging industrial users less or would you favor charging industrial and residential users the same amount for each unit of electricity they use?

	Favor system of charging industrial users less	(Don't know)	Favor charging all users same amount for each unit of electricity
National	35%	2	63
West Virginia	32%	1	67

22. How much effect do you think the electricity rates paid by industry have on the prices they charge consumers for the products they make? Do you feel that industrial electricity rates have a large effect on the prices paid by consumers for products and services, some effect, hardly any effect, or no effect at all?

	A large effect	Some effect	Hardly any effect	No effect at all	(Don't know)
National	25%	55	11	6	2
West Virginia	27%	52	12	6	3

23. Some people say that making industrial users pay more for their electricity will help hold down electricity rates for residential consumers. Others say that while raising rates for industrial users may hold down residential electricity rates, consumers won't gain anything in the long run because higher industrial rates will ultimately just be passed along to consumers in the form of higher prices for products and services. Would you strongly favor, somewhat favor, somewhat oppose, or strongly oppose raising industrial electrical rates if in fact, this did lead to increased prices for the goods and services industries produce?

	Strongly favor	Somewhat favor	Somewhat oppose	Strongly oppose	(Don't know)
National	12%	27	29	30	3
West Virginia	13%	28	30	25	4

24. Let's say a company is deciding where to build a new factory and has two or three different areas or regions under consideration. Assuming all other costs are relatively equal, do you think the company pays a lot of attention, as they make their plant location decision, to what the electric rates are in each location, some attention, only a little attention, or no attention at all?

	A lot of attention	Some attention	Only a little attention	No attention at all	(Don't know)
National	28%	44	15	12	1
West Virginia	29%	41	19	10	1

25. Thinking about this area--would you favor or oppose having industrial users of electricity pay more than it costs to supply them with the electricity they use--thus holding down the increase in residential rates--if this meant that some companies and factories would not expand their operations and increase jobs in this area or might actually move to other areas that have lower industrial electricity rates?

	Favor	(Don't know)	Oppose
National	37%	4	59
West Virginia	33%	4	63

26. Let's say there was a clear choice--your own electric rates would go up less rapidly but industrial expansion and the number of new plants and jobs in your area would be reduced. If that were the choice, would you strongly favor, somewhat favor, somewhat oppose, or strongly oppose having industrial electricity users pay more than it costs to supply them with the electricity they use?

	Strongly favor	Somewhat favor	Somewhat oppose	Strongly oppose	(Don't know)
National	9%	26	35	28	3
West Virginia	9%	24	37	27	2

I'd like to ask you a few last questions for statistical purposes only.

27. [OBSERVATION] Sex

	Female	Male
National	50%	50
West Virginia	50%	50

28. What was the last grade you completed in school?

1. Some grade school (1-8)
2. Some high school (9-11)
3. Graduated high school
4. Technical/vocational school
5. Some college
6. Graduated college
7. Graduate/professional school
8. (Don't know)

	1	2	3	4	5	6	7	8
National	6%	8	37	2	21	17	9	--
West Virginia	11%	12	43	2	14	12	6	1

29. In which of the categories I read is the total annual income of this entire household--of everyone living in this house? [READ RESPONSES]

1. $0-6,999
2. $7-9,999
3. $10-12,999
4. $13-14,999
5. $15-19,999
6. $20-24,999
7. $25,000 and over
8. (Refused)
9. (Don't know)

	1	2	3	4	5	6	7	8	9
National	8%	9	7	7	13	14	35	6	2
West Virginia	10%	11	10	7	16	14	25	3	3

30. What is your age? [RECORD IN PROPER CATEGORY]

1. 18-25
2. 26-35
3. 36-45
4. 46-55
5. 56-65
6. Over 65
7. (Refused)

	1	2	3	4	5	6	7
National	17%	26	16	17	11	12	1
West Virginia	18%	22	14	18	17	10	1

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